CLASE DEL MARTES: 03-11-09

EJERCICIOS DE DERIVACIÓN

	$f(x)$	$f'(X)$
23	$f(x) = COS(-x+5)$	$f'(x) = sen(-x+5)$
24	$f(x) = COS^3(-x+5)$	$f'(x) = 3cos^2(-x+5)\cdot sen(-x+5)$
25	$f(x) = tag(4x)$	$f'(x) = \frac{1}{cos^2(4x)}\cdot 4$
26	$f(x) = ln(x+x^2)$	$f'(x) = \frac{1+2x}{x+x^2}$
27	$f(x) = logx$	$f'(x) = \frac{1}{x\cdot ln10}$
28	$f(x) = senx\cdot lnx$	$f'(x) = cosx\cdot lnx + \frac{senx}{x}$
29	$f(x) = x\cdot lnx^2$	$f'(x) = 1\cdot lnx^2 + x\cdot\frac{2x}{x^2} = lnx^2 + 2$
30	$f(x) = tag(\sqrt[3]{x^2})$	$f'(x) = \frac{1}{cos^2(\sqrt[3]{x^2})}\cdot\frac{2}{3}\cdot x^{-\frac{1}{3}} = \frac{2}{3\sqrt[3]{x}cos^2(\sqrt[3]{x^2})}$
31	$f(x) = ln^2x^3$	$f'(x) = 2lnx^3\cdot\frac{3x^2}{x^3} = \frac{6lnx^3}{x}$
32	$f(x) = (x+senx)^2$	$f'(x) = 2\cdot(x+senx)\cdot(1+cosx)$
33	$f(x) = \frac{senx}{cos2x}$	$f'(x) = \frac{cosx\cdot cos2x - senx\cdot(-2sen2x)}{cos^2 2x}$
34	$f(x) = ln\left(\sqrt{\frac{1-x}{1+x}}\right)$	$f(x) = \frac{1}{2}[ln(1-x) + ln(1+x)];$ $f'(x) = \frac{1}{2}\left[\frac{-1}{1-x} + \frac{1}{1+x}\right] = \frac{1}{2}\frac{-(1+x)+(1-x)}{1-x^2}$ $= \frac{-x}{1-x^2}$

Realiza los siguientes ejercicios de nuestro libro de texto:

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